

ULTEM 9085

ULTEM Polyetherimide resin (PEI) is an amorphous high-performance polymer which is characterised by excellent thermal properties, good chemical resistance, inherent flame retardancy and exceptional dimensional stability.



Benefits

ULTEM 9085 is naturally flame-retardant and produces minimal smoke when exposed to fire. It delivers outstanding strength and stiffness even at elevated temperatures, while offering excellent resistance to a wide range of chemicals, including automotive fluids, fully halogenated hydrocarbons, alcohols, and aqueous solutions. Additionally, ULTEM 9085 maintains transparency across visible light, infrared, and microwave radiation.



Physical & Mechanical Properties

Property	Typical Value
Tg (°C)	177
Melt Temp (°C)	330
Density (kg/m ³)	1270
Yield strength (MPa)	69
Bio-Compatibility	Yes

	Good	Average	Poor
Chemical Resistance	■		
UV Stability	■		
Reusability			■
Impact Resistance	■		
Fire Performance	■		

Typical Applications

- Functional prototyping for high-demand applications
- Fixtures
- End-of-arm tools
- Low-volume production and highly-customised parts
- Jigs
- Composite moulds

Industries

- Aerospace
- Defence
- Space
- Rail
- Marine
- Nuclear
- Automotive

Colour Options

- Black
- White
- Blue
- Red
- Yellow
- Nectarine
- Ivory
- Green
- Grey
- Natural

To discuss your next additive manufacturing challenge, call our experts on **03330 150 563**

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